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LOGINID: ssptaeal1624

PASSWORD:

```
TERMINAL (ENTER 1, 2, 3, OR ?):2
Web Page for STN Seminar Schedule - N. America
NEWS 2 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches
                Zentralblatt
NEWS 3 OCT 19 BEILSTEIN updated with new compounds
NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 5 NOV 19 WPIX enhanced with XML display format
NEWS 6 NOV 30 ICSD reloaded with enhancements
NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and STN
NEWS 11 DEC 17 DGENE now includes more than 10 million sequences
NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
                MEDLINE segment
NEWS 13 DEC 17 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 14 DEC 17 CA/Caplus enhanced with new custom IPC display formats
NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content
                from USPATOLD
NEWS 16 JAN 02 STN pricing information for 2008 now available
NEWS 17 JAN 16 CAS patent coverage enhanced to include exemplified
                prophetic substances
NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new
                custom IPC display formats
NEWS 19 JAN 28 MARPAT searching enhanced
NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days
                of publication
NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 22 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 27 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                U.S. National Patent Classification
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3.
            AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
```

NEWS HOURS STN Operating Hours Plus Help Desk Availability

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NEWS IPC8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:54:51 ON 04 MAR 2008

=> file req

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 16:54:56 ON 04 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10550267.str

chain nodes : 11 12 13 14 15 16 17 18 19 20 21 22 23 ring nodes :

1 2 3 4 5 6 7 8 9 10

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:Atom 19:CLASS 20:CLASS 21:CLASS 22:Atom 23:CLASS 22:Atom 23:CLASS

L1 STRUCTURE UPLOADED

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11 full
FULL SEARCH INITIATED 16:55:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED = 9839 TO ITERATE

100.0% PROCESSED 9839 ITERATIONS
```

0 ANSWERS

L2 0 SEA SSS FUL L1

SEARCH TIME: 00.00.01

 ${\tt Uploading \ C:\ Program \ Files \ Stnexp \ Queries \ 10550267 noalk.str}$

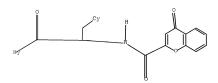
11 12 13 14 15 16 17 18 19 20 21 ring nodes:
1 2 3 4 5 6 7 8 9 10 chain bonds:
8-11 10-21 11-12 11-14 12-15 12-13 13-16 13-18 16-17 18-20 18-19 ring bonds:
8-11 6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 exact/norm bonds:
10-21 11-12 11-14 12-13 16-17 18-20 18-19 exact bonds:
2-7 3-10 7-8 8-9 8-11 9-10 12-15 13-16 13-18 normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 isolated ring systems:

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 13:CLASS 13:CLASS 15:CLASS 16:CLASS 17:Atom 18:CLASS 19:CLASS 20:Atom 21:CLASS

L3 STRUCTURE UPLOADED

=> d 13 L3 HAS NO ANSWERS L3 STR

chain nodes :



Structure attributes must be viewed using STN Express query preparation.

=> s 13 full FULL SEARCH INITIATED 16:57:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 472 TO ITERATE

100.0% PROCESSED 472 ITERATIONS SEARCH TIME: 00.00.01

L4 8 SEA SSS FUL L3

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

8 ANSWERS

358.31

358.10

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:57:43 ON 04 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR SIN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 4 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 3 Mar 2008 (20080303/ED)

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http://www.cas.org/infopolicy.html

=> s 14 full

L5 1 L4

=> d ibib abs hitstr

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:772652 CAPLUS Full-text

DOCUMENT NUMBER: 141:261061

TITLE: Preparation of substituted piperidine and piperazine amino acid derivatives as melanocortin-4 receptor

modulators
INVENTOR(S): Soeberdt, Michael; Weyermann, Philipp; Von Sprecher,

Andreas

PATENT ASSIGNEE(S): Myocontract Ltd., Switz. SOURCE: Eur. Pat. Appl., 66 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | | | | | | | APPLICATION NO. | | | | | | | | | | | | |
|---------|------------------------|------|-------|------|-------------|-------------|------------------|----------------|------|----------------------------------|----------------|------|------|----------|-------|----------|-----|--|--|
| | 1460 | | | | | | | | | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | | |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | | | |
| AU | AU 2004222095 | | | | A1 20040930 | | | AU 2004-222095 | | | | | | 20040319 | | | | | |
| AU | 2004 | 2220 | 95 | | B2 20070517 | | | | | | | | | | | | | | |
| CA | 2519 | 442 | | | A1 | | 2004 | 0930 | | CA 2 | 004- | 2519 | 442 | | 2 | 0040 | 319 | | |
| WO | 2004 | | | | | | | WO 2004-EP2907 | | | | | | | | | | | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | | |
| | | CN. | co. | CR. | CU, | CZ. | DE. | DK. | DM. | DZ. | EC. | EE. | EG. | ES. | FI. | GB, | GD, | | |
| | | GE. | GH, | GM. | HR. | HU. | ID, | IL. | IN. | IS. | JP. | KE. | KG. | KP. | KR. | KZ, | LC, | | |
| | | | | | | | LV. | | | | | | | | | | | | |
| | | | | | | | PL, | | | | | | | | | | | | |
| | | | | | | | TZ, | | | | | | | | | | | | |
| | RW: | | | | | | MW. | | | | | | | | | | | | |
| | | | | | | | TJ, | | | | | | | | | | | | |
| | | | | | | | HU, | | | | | | | | | | | | |
| | | | | | | | CG, | | | | | | | | | | | | |
| | | TD, | | DL / | D0 / | CL, | 00, | 01/ | CITY | City | OL 17 | 027 | 0117 | 1127 | LILLY | 110/ | DIV | | |
| FD | | | | | | A1 20051214 | | | | EP 2004-721899 | | | | | | 20040319 | | | |
| | EP 1603912 | | | | | | | | | | | | | | | 20010013 | | | |
| | | | | | | | ES, | | | GR. | TT. | T.T. | LII. | NT. | SE. | MC. | PT. | | |
| | 14. | | | | | | RO, | | | | | | | | | | | | |
| .TD | 2006 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | JP 2006-504754
AT 2004-721899 | | | | | | | | | |
| | | | | | | | | | | US 2006-550267 | | | | | | | | | |
| | PRIORITY APPLN. INFO.: | | | | | A1 20001020 | | | | EP 2003-6254 | | | | | | | | | |
| FKIOKII | 1 APP | DIA. | TIMEO | • • | | | | | | | | | | | | | | | |
| OTHER S | THER SOURCE(S): | | | | | | MARPAT 141:26106 | | | | WO 2004-EP2907 | | | | | 0040 | 319 | | |

GI

AB The invention relates to novel substituted piperidine and piperazine derivs. A-CO(CH2)mCH(CH2-Ar)(CH2)nNHCOR1 [Ar is (un)substituted aryl or heteroaryl; R1 is (un)substituted chromone-2-yl, 3-aminochromone-2-yl or 4-oxoquinolin-3-yl; A is substituted 1-piperidinyl or 1-piperazinyl; m, n are 0-2] or their pharmaceutically-acceptable salts for use as melanocortin-4 receptor (MC-4R) modulators. MC-4R agonists of the invention can be used for the treatment of disorders and diseases such as obesity, diabetes, and sexual dysfunction, whereas the MC-4R antagonists are useful for the treatment of cancer cachexia, muscle wasting, anorexia, anxiety, depression, etc. Thus, I was prepared via

I

coupling reactions of Boc-D-4-chlorophenylalanine (Boc = tert-butoxycarbonyl), 1,2-dihydro-1-(methylsulfonyl)spiro(3H-indole-3,4"-piperidine]monohydrochloride and chromone-2-carboxylic acid.

IT 756878-03-3P 756878-10-1P 756878-13-4P 756878-16-7P 756878-18-9P 756878-20-3P

756878-26-9P 756878-28-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine and piperazine amino acid derivs. as melanocortin-4 receptor modulators)

RN 756878-03-2 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxoethyl]-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.

- RN 756878-10-1 CAPLUS
- CN 4H-1-Benzopyran-2-carboxamide, N-[(1S)-1-[(4-chlorophenyl)methyl]-2-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-2-oxoethyl]-4-oxo- (CA INDEX NAME)

RN 756878-13-4 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-(2-cyanophenyl)-1-piperazinyl]-2-oxoethyl]-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.

RN 756878-16-7 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-(2-nitrophenyl)-1-piperazinyl]-2-oxoethyl]-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.

RN 756878-18-9 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-chloropheny1)methy1]-2-[4-cyclohexy1-4-(1H-1,2/4-triazol-1-ylmethy1)-1-piperidiny1]-2-oxoethy1]-4-oxo-(CA INDEX NAME)

- RN 756878-20-3 CAPLUS
- CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-2-[4-(5-bromo-2-cyanopheny1)-1-piperaziny1]-1-[(4-chloropheny1)methy1]-2-oxoethy1]-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.

- RN 756878-26-9 CAPLUS
- CN 4H-1-Benzopyran-2-carboxamide, N-[(1S)-2-[4-(5-bromo-2-cyanophenyl)-1piperazinyl]-1-[(4-chlorophenyl)methyl]-2-oxoethyl]-4-oxo- (CA INDEX NAME)

RN 756878-28-1 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-chloropheny1)methy1]-2-[4-[2-(2-methy1-1-oxoropy1)amino]pheny1]-1-piperaziny1]-2-oxoethy1]-4-oxo-(CA INDEX NAME)

Absolute stereochemistry.

23:CLASS 24:CLASS

$$\bigcap_{\mathbf{H}} \bigcap_{\mathbf{H}} \bigcap_{\mathbf{H}} \bigcap_{\mathbf{Pr}-\mathbf{1}} \bigcap_{\mathbf{r}} \bigcap_{\mathbf{H}} \bigcap_{\mathbf{r}} \bigcap_{\mathbf$$

=> Uploading C:\Program Files\Stnexp\Queries\10550267alk.str

```
chain nodes :
11 12 13 14 15 16 17 18 19 20 21 23 24
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
8-11 10-21 11-12 11-14 12-15 12-24 13-16 13-24 13-23 16-17 18-20 18-19
18-23
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10
exact/norm bonds :
10-21 11-12 11-14 12-24 13-24 13-23 16-17 18-20 18-19 18-23
exact bonds :
2-7 3-10 7-8 8-9 8-11 9-10 12-15 13-16
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:CLASS
19:CLASS 20:Atom 21:CLASS
```

=> d 16 L6 HAS NO ANSWERS L6 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 16 full PEGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 16:59:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5640 TO ITERATE

100.0% PROCESSED 5640 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

L7 0 SEA SSS FUL L6

L8 0 L7

=> Uploading C:\Program Files\Stnexp\Queries\10550267onealk.str

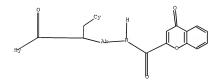
```
chain nodes :
11 12 13 14 15 16 17 18 19 20 21 23
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
8-11 10-21 11-12 11-14 12-15 12-23 13-16 13-23 13-18 16-17 18-20 18-19
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10
exact/norm bonds :
10-21 11-12 11-14 12-23 13-23 16-17 18-20 18-19
exact bonds :
2-7 3-10 7-8 8-9 8-11 9-10 12-15 13-16 13-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :
```

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:CLASS 19:CLASS 20:Atom 21:CLASS 23:CLASS

L9 STRUCTURE UPLOADED

=> d 19 L9 HAS NO ANSWERS L9 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 19 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 17:01:26 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5640 TO ITERATE

100.0% PROCESSED 5640 ITERATIONS SEARCH TIME: 00.00.01 0 ANSWERS

L10 0 SEA SSS FUL L9

L11 0 L10

=> file req

 COST IN U.S. DOLLARS
 SINCE FILE ENTRY
 TOTAL SESSION

 FULL ESTIMATED COST
 0.48
 724.32

 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
 SINCE FILE TOTAL ENTRY SESSION
 TOTAL SUBSCRIBER PRICE
 TOTAL ENTRY SESSION

 CA SUBSCRIBER PRICE
 0.00
 -0.80
 -0.80

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http://www.cas.org/support/stngen/stndoc/properties.html

=> file reg
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST SINCE FILE TOTAL
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION
ENTRY SESSION
ENTRY SESSION

0.00

-0.80

FILE 'REGISTRY' ENTERED AT 17:02:36 ON 04 MAR 2008

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10550267otheralk.str

```
chain nodes:
11 12 13 14 15 16 17 18 19 20 21 23
ring nodes:
1 2 3 4 5 6 7 8 9 10
chain bonds:
8-11 10-21 11-12 11-14 12-15 12-13 13-16 13-23 16-17 18-20 18-19 18-23
```

19

15

ring bonds:
1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10
exact/norm bonds:
10-21 11-12 11-14 12-13 13-23 16-17 18-20 18-19 18-23
exact bonds:
2-7 3-10 7-8 8-9 8-11 9-10 12-15 13-16
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems:
containing 1:

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:Atom 18:CLASS 19:CLASS 20:Atom 21:CLASS

L12 STRUCTURE UPLOADED

=> d 112 L12 HAS NO ANSWERS L12 STR

Structure attributes must be viewed using STN Express guery preparation.

=> s 112 full

FULL SEARCH INITIATED 17:04:23 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 2302 TO ITERATE

100.0% PROCESSED 2302 ITERATIONS SEARCH TIME: 00.00.01

2 ANSWERS

2 SEA SSS FUL L12 L13

=> file caplus

COST IN U.S. DOLLARS FULL ESTIMATED COST

TOTAL ENTRY SESSION 179.28 904.52

SINCE FILE

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

0.00 -0.80

FILE 'CAPLUS' ENTERED AT 17:04:29 ON 04 MAR 2008

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FILE COVERS 1907 - 4 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 3 Mar 2008 (20080303/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> s 113 full

L14 1 L13

=> d ibib abs hitstr

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:772652 CAPLUS Full-text

DOCUMENT NUMBER: 141:261061

TITLE: Preparation of substituted piperidine and piperazine

amino acid derivatives as melanocortin-4 receptor

modulators
INVENTOR(S): Soeberdt, I

INVENTOR(S): Soeberdt, Michael; Weyermann, Philipp; Von Sprecher,
Andreas

PATENT ASSIGNEE(S): Myocontract Ltd., Switz.
SOURCE: Eur. Pat. Appl., 66 pp.

SOURCE: Eur. Pat. Appl., 66 pp. CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | | | | | | | DATE | | | APPLICATION NO. | | | | | | | | |
|------------|------------|-------|-----|-----|-------------|------|------|------|-----------------|-----------------|----------|----------|-----|-----|-----|----------|-----|--|
| | 1460 | | | | | | | | | | | | | | | 0030 | 320 | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT | |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | SK | | |
| AU | 2004222095 | | | | A1 | | 2004 | 0930 | | AU 2 | 004- | 20040319 | | | | | | |
| ΑU | 2004 | 2220 | 95 | | B2 20070517 | | | | | | | | | | | | | |
| CA | 2519442 | | | | A1 20040930 | | | | CA 2004-2519442 | | | | | | | 20040319 | | |
| WO | 2004 | 0832 | 09 | | A1 | | 2004 | 0930 | WO 2004-EP2907 | | | | | | | 20040319 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD | |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, | |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, | |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | |
| | | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | |
| | | ES, | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | |
| | | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | |
| | | TD, | TG | | | | | | | | | | | | | | | |
| EΡ | 1603912 | | | | A1 | | 2005 | 1214 | | EP 2 | 20040319 | | | | | | | |
| EΡ | 1603912 | | | B1 | | 2007 | 0718 | | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, | |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR, | BG, | CZ, | EE, | HU, | PL, | SK | |
| JP | 2006520362 | | | | T | | 2006 | 0907 | | JP 2 | 006- | 20040319 | | | | | | |
| | 3673 | | | | | | | | | AT 2004-721899 | | | | | | | | |
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EP 2003-6254 WO 2004-EP2907 A 20030320 A 20040319

OTHER SOURCE(S):

MARPAT 141:261061

I

AB The invention relates to novel substituted piperidine and piperazine derivs.

A-CO(CH2)/mCH(CH2-Ar)(CH2)/mNCOR1 [Ar is (un) substituted arryl or heterayl; R1 is (un)substituted arryl or heterayl; R1 is (un)substituted chromone-2-yl, 3-aminochromone-2-yl or 4-oxoquinolin-3-yl; A is substituted 1-piperidinyl or 1-piperazinyl; m, n are 0-2) or their pharmaceutically-acceptable salts for use as melanocortin-4 receptor (MC-4R) modulators. MC-4R agonists of the invention can be used for the treatment of disorders and diseases such as obesity, diabetes, and sexual dysfunction, whereas the MC-4R antagonists are useful for the treatment of cancer cachexia, muscle wasting, anorexia, anxiety, depression, etc. Thus, I was prepared via coupling reactions of Boc-9-4-chlorophenylalanine (Boc = tert-butoxycarbonyl), 1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidine] monohydrochloride and chromone-2-carboxylic acid.

IT 756878-22-5P 756878-24-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USes)

(preparation of piperidine and piperazine amino acid derivs. as melanocortin-4 receptor modulators)

RN 756878-22-5 CAPLUS

CN 4H-1-Benzopyran-2-carboxamide, N-[(1S)-1-[(4-chlorophenyl)methyl]-3-[1,2-dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-3-oxooroovl]-4-oxoo (CA INDEX NAME)

RN 756878-24-7 CAPLUS

CN

4H-1-Benzopyran-2-carboxamide, N-[(1R)-1-[(4-ch1oropheny1)methy1]-3-[1,2-k]dihydro-1-(methylsulfonyl)spiro[3H-indole-3,4'-piperidin]-1'-yl]-3oxopropyl]-4-oxo- (CA INDEX NAME)

Absolute stereochemistry.

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(FILE 'HOME' ENTERED AT 16:54:51 ON 04 MAR 2008)

FILE 'REGISTRY' ENTERED AT 16:54:56 ON 04 MAR 2008 L1 STRUCTURE UPLOADED

L2 0 S L1 FULL L3 STRUCTURE UPLOADED

L4 8 S L3 FULL

FILE 'CAPLUS' ENTERED AT 16:57:43 ON 04 MAR 2008

L5 1 S L4 FULL L6 STRUCTURE UPLOADED S L6 FILE 'REGISTRY' ENTERED AT 16:59:49 ON 04 MAR 2008 L7 0 S L6 FULL FILE 'CAPLUS' ENTERED AT 16:59:50 ON 04 MAR 2008 L8 0 S L7 FULL L9 STRUCTURE UPLOADED S L9 FILE 'REGISTRY' ENTERED AT 17:01:26 ON 04 MAR 2008 0 S L9 FULL FILE 'CAPLUS' ENTERED AT 17:01:27 ON 04 MAR 2008 0 S L10 FULL FILE 'REGISTRY' ENTERED AT 17:01:33 ON 04 MAR 2008 FILE 'REGISTRY' ENTERED AT 17:02:36 ON 04 MAR 2008 L12 STRUCTURE UPLOADED L13 2 S L12 FULL FILE 'CAPLUS' ENTERED AT 17:04:29 ON 04 MAR 2008 L14 1 S L13 FULL => log y COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 6.41 910.93

SINCE FILE

ENTRY

-0.80

TOTAL SESSION

-1.60

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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